

# Metribuzin in Early Planted Soybean

## Brooklyn, WI 2024

### Trial Information

Trial Sponsor(s): United Soybean Board

Objective: Evaluate different metribuzin rates in comprehensive herbicide programs to maximize PRE waterhemp control and minimize crop injury in early- and late-planted soybeans

Crop: Enlist Soybean

Variety: NK22-C4E3

Weed species (pressure): glyphosate-R waterhemp (high)

Herbicide Application(s):	Early Planting Date	Late Planting Date
	PRE – 4/24	PRE – 5/23
	POST – 6/20 (V6/R1)	POST #1 – 6/27 (V3)
		POST #2 – 7/10 (R1/R2)

For the full report see trial #24-BRO-USB01 in the [2024 Wisconsin Weed Science Research Report](#)



**Cropping Systems Weed Science**  
UNIVERSITY OF WISCONSIN-MADISON

# Metribuzin in Early Planted Soybean

## Brooklyn, WI 2024

Plant Date	POST App Date	Trt # Herbicide (rate acre <sup>-1</sup> )	Waterhemp Density <sup>a</sup> (plants m <sup>-2</sup> )			Yield <sup>b</sup> bu acre <sup>-1</sup>
			14 DAE	28 DAE	@POST	
Early	-	8 Untreated Check	53.0	69.0	76.5	47 d
Late	-	16 Untreated Check	29.0	35.5	48.0	37 e
<b>Two-Pass – PRE (5/23) fb POST<sup>c</sup></b>						
Early 6/20		1 Fierce EZ (6 fl oz)	0.0	4.0	10.5	74 ab
		2 Fierce EZ (6 fl oz) + Metricor DF (4 oz)	0.5	3.0	8.0	76 a
		3 Fierce EZ (6 fl oz) + Metricor DF (8 oz)	2.0	8.5	9.0	77 a
		4 Fierce EZ (6 fl oz) + Metricor DF (12 oz)	0.5	6.0	7.0	77 a
		5 Fierce EZ (6 fl oz) + Metricor DF (16 oz)	1.0	2.5	10.0	75 a
		6 Spartan (10 fl oz)	0.5	18.0	26.0	75 a
		7 Preview 2.1SC (23 fl oz)	3.0	24.0	44.0	76 a
<b>Average (trts 2-7)</b>			<b>1.1</b>	<b>9.4</b>	<b>16.4</b>	<b>76</b>
Late 7/10		9 Fierce EZ (6 fl oz)	0.0	0.5	2.5	63 c
		10 Fierce EZ (6 fl oz) + Metricor DF (4 oz)	0.0	0.5	2.0	66 bc
		11 Fierce EZ (6 fl oz) + Metricor DF (8 oz)	0.0	1.5	3.5	62 c
		12 Fierce EZ (6 fl oz) + Metricor DF (12 oz)	0.0	2.0	5.5	66 bc
		13 Fierce EZ (6 fl oz) + Metricor DF (16 oz)	0.0	0.0	4.5	65 bc
	6/27	14 Spartan (10 fl oz)	4.5	-	17.0	67 bc
	7/10	15 Preview 2.1SC (23 fl oz)	4.0	19.5	24.5	66 bc
<b>Average (trts 9-15)</b>			<b>1.2</b>	<b>3.4</b>	<b>8.5</b>	<b>65</b>
<b>LSD (<math>\alpha=0.10</math>)</b>			<b>9.7</b>	<b>15.7</b>	<b>22.2</b>	<b>5</b>
<b>p value</b>			<b>&lt;.001</b>	<b>&lt;.001</b>	<b>&lt;.001</b>	<b>&lt;.001</b>

<sup>a</sup>Waterhemp density collected from two 0.25 m<sup>2</sup> quadrats 14 and 28 days after emergence (DAE) of each respective planting date and at the time of the POST herbicide application.

<sup>b</sup>Yield values with the same letter are not significantly different.

<sup>c</sup>POST application of Liberty (32 oz) + Enlist One (2 pt) + Dual II Magnum (1.5 pt) + AMS (3 lb) was made when average waterhemp height reached 4 inches.

# Metribuzin in Early Planted Soybean

## Brooklyn, WI 2024

Plot pictures taken on 6/20

57 days after the PRE application (early plant date)

28 days after the PRE application (late plant date)

The day of the POST application (trts 1-7)

**57 days after PRE (6/20)**  
**Untreated Check**

**Trt 8**  
**Early Planting**



57 days after PRE (6/20)

PRE: 6 oz Fierce EZ

Trt 1  
Early Planting



57 days after PRE (6/20)

PRE: 6 oz Fierce EZ + 4 oz Metlicor DF

Trt 2

Early Planting



57 days after PRE (6/20)

PRE: 6 oz Fierce EZ + 8 oz Metlicor DF

Trt 3

Early Planting



57 days after PRE (6/20)

PRE: 6 oz Fierce EZ + 12 oz Metricor DF

Trt 4

Early Planting



57 days after PRE (6/20)

Trt 5

PRE: 6 oz Fierce EZ + 16 oz Metricor DF

Early Planting



57 days after PRE (6/20)  
PRE: 10 oz Spartan

Trt 6  
Early Planting



57 days after PRE (6/20)  
PRE: 23 oz Preview 2.1SC

Trt 7  
Early Planting



**28 days after PRE (6/20)**

**Untreated Check**

**Trt 16  
Late Planting**



28 days after PRE (6/20)

PRE: 6 oz Fierce EZ

Trt 9

Late Planting



28 days after PRE (6/20)

PRE: 6 oz Fierce EZ + 4 oz Metlicor DF

Trt 10

Late Planting



28 days after PRE (6/20)

PRE: 6 oz Fierce EZ + 8 oz Metlicor DF

Trt 11

Late Planting



28 days after PRE (6/20)

PRE: 6 oz Fierce EZ + 12 oz Metricor DF

Trt 12

Late Planting



28 days after PRE (6/20)

Trt 13

PRE: 6 oz Fierce EZ + 16 oz Metricor DF

Late Planting



**28 days after PRE (6/20)**  
**PRE: 10 oz Spartan**

**Trt 14**  
**Late Planting**



**28 days after PRE (6/20)  
PRE: 23 oz Preview 2.1SC**

**Trt 15  
Late Planting**



# Metribuzin in Early Planted Soybean

## Brooklyn, WI 2024

Plot pictures taken on 7/10

77 days after the PRE application (early plant date)

48 days after the PRE application (late plant date)

20 days after the POST application (trts 1-7)

13 days after the POST application (trts 14)

The day of the POST application (trts 9-13, 15)

**77 days after PRE (7/10)**  
**Untreated Check**

**Trt 8**  
**Early Planting**



20 days after POST (7/10)

Trt 1

PRE: 6 oz Fierce EZ *fb*

Early Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



20 days after POST (7/10)

Trt 2

PRE: 6 oz Fierce EZ + 4 oz Metricor DF *fb*

Early Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



20 days after POST (7/10)

Trt 3

PRE: 6 oz Fierce EZ + 8 oz Metricor DF *fb*

Early Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



20 days after POST (7/10)

Trt 4

PRE: 6 oz Fierce EZ + 12 oz Metricor DF *fb*

Early Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



20 days after POST (7/10)

Trt 5

PRE: 6 oz Fierce EZ + 16 oz Metricor DF *fb*

Early Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



20 days after POST (7/10)

Trt 6

PRE: 10 oz Spartan *fb*

Early Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



20 days after POST (7/10)

Trt 7

PRE: 23 oz Preview 2.1SC *fb*

Early Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



**48 days after PRE (7/10)**

**Untreated Check**

**Trt 16**

**Late Planting**



**48 days after PRE (7/10)**

**PRE: 6 oz Fierce EZ**

**Trt 9**

**Late Planting**



48 days after PRE (7/10)

PRE: 6 oz Fierce EZ + 4 oz Metlicor DF

Trt 10

Late Planting



**48 days after PRE (7/10)**

**PRE: 6 oz Fierce EZ + 8 oz Metricor DF**

**Trt 11**

**Late Planting**



48 days after PRE (7/10)

PRE: 6 oz Fierce EZ + 12 oz Metricor DF

Trt 12

Late Planting



48 days after PRE (7/10)

PRE: 6 oz Fierce EZ + 16 oz Metricor DF

Trt 13

Late Planting



13 days after POST (7/10)

Trt 14

PRE: 10 oz Spartan *fb*

Late Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



**48 days after PRE (7/10)  
PRE: 23 oz Preview 2.1SC**

**Trt 15  
Late Planting**



# Metribuzin in Early Planted Soybean

## Brooklyn, WI 2024

Plot pictures taken on 10/2  
The day of soybean harvest



Soybean Harvest (10/2)

Trt 1

PRE: 6 oz Fierce EZ *fb*

Early Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



Soybean Harvest (10/2)

Trt 2

PRE: 6 oz Fierce EZ + 4 oz Metricor DF *fb*

Early Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



Soybean Harvest (10/2)

Trt 3

PRE: 6 oz Fierce EZ + 8 oz Metricor DF *fb*

Early Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



Soybean Harvest (10/2)

Trt 4

PRE: 6 oz Fierce EZ + 12 oz Metricor DF *fb*

Early Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



Trt 5

Early Planting

Soybean Harvest (10/2)

PRE: 6 oz Fierce EZ + 16 oz Metricor DF *fb*

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



Soybean Harvest (10/2)

Trt 6

PRE: 10 oz Spartan *fb*

Early Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



**Soybean Harvest (10/2)**  
**PRE: 23 oz Preview 2.1SC *fb***  
**POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS**

Trt 7  
Early Planting





Soybean Harvest (10/2)

Trt 9

PRE: 6 oz Fierce EZ *fb*

Late Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



Soybean Harvest (10/2)

Trt 10

PRE: 6 oz Fierce EZ + 4 oz Metricor DF *fb*

Late Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



**Soybean Harvest (10/2)****PRE: 6 oz Fierce EZ + 8 oz Metricor DF *fb*****POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS**

Trt 12

Late Planting

Soybean Harvest (10/2)

PRE: 6 oz Fierce EZ + 12 oz Metricor DF *fb*

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



Soybean Harvest (10/2)

Trt 13

PRE: 6 oz Fierce EZ + 16 oz Metricor DF *fb*

Late Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



Soybean Harvest (10/2)

Trt 14

PRE: 10 oz Spartan *fb*

Late Planting

POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS



**Soybean Harvest (10/2)**  
**PRE: 23 oz Preview 2.1SC *fb***  
**POST: 2 pt Enlist One + 32 oz Liberty + 1.5 pt Dual II Magnum + AMS**

Trt 15

Late Planting

